Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A coating material for a thermal barrier coating having excellent corrosion resistance and heat resistance comprising a substrate, an undercoat made of an aluminum-containing heat-resistant alloy, Cr_2O_3 layer as a middle layer, and a top coat made of ZrO_2 based ceramic, in which the Cr_2O_3 layer is formed through a chemical densification treatment by applying an aqueous solution of one or more compounds selected from chromic anhydride, ammonium chromate, and ammonium bichromate; and firing it..

2. (Original) A coating material for a thermal barrier coating having excellent corrosion resistance and heat resistance comprising a substrate, an undercoat made of an aluminum-containing heat-resistant alloy, Al_2O_3 layer produced on the surface of the undercoat by preferentially oxidizing Al in the components of the undercoat in the presence of Cr_2O_3 layer and Cr_2O_3 layer formed thereon as a middle layer on the undercoat, and a top coat made of ZrO_2 based ceramic.

3. (Currently Amended) A coating material for a thermal barrier coating according to claim 1, wherein the Cr_2O_3 layer as a middle layer is a chemical densified film having a

thickness of 0.2-10 μm ~~obtained by applying an aqueous solution of one or more selected from chromic anhydride, ammonium chromate and ammonium bichromate and firing it~~.

4. (Original) A coating material for a thermal barrier coating according to claim 2, wherein the Al_2O_3 layer has a thickness of 1-30 μm.

5. (Previously Presented) A coating material for a thermal barrier coating according to claim 1, wherein the undercoat is a heat-resistant alloy having an Al content of 3-24 mass% and represented by the following chemical formula:

MCrAlX

wherein M: one or more selected from Co, Ni and Fe,

X: one or more selected from Y, Hf, Ta, Cs, Ce, La, Th, W, Si, Pt, Mn and B.

6. (Previously Presented) A coating material for a thermal barrier coating according to claim 1, wherein the undercoat is one formed by a spraying process or an electron beam deposition process at a thickness of 30-500 μm.

7. (Previously Presented) A coating material for a thermal barrier coating according to claim 1, wherein the top coat is a ZrO_2 based ceramic coating containing 5-40 mass% of at least one oxide selected from Y_2O_3, CaO, CeO_2, MgO, SiO_2, Yb_2O_3 and Sc_2O_3 and formed by a spraying process or an electron beam deposition process at a thickness of 50-600 μm.

8. (Withdrawn) A method of producing a coating material for a thermal barrier coating having excellent corrosion resistance and heat resistance, which comprises forming an undercoat made of a heat-resistant alloy having an Al content of 3-24 mass% on a surface of a substrate through spraying process or an electron beam deposition process, forming a middle layer of Cr_2O_3 layer having a thickness of 0.2-10 μm by repeating a procedure of applying an aqueous mixed solution of one or more of chromic anhydride, ammonium chromate and ammonium bichromate and firing under heating at 500-900 K for 1-5 hours one time or plural times, and forming a top coat of ZrO_2 based ceramic on the middle layer through a spraying process or an electron beam deposition process.

9. (Withdrawn) A method of producing a coating material for thermal barrier coating having excellent corrosion resistance and heat resistance, which comprises forming an undercoat made of a heat-resistant alloy having an Al content of 3-24 mass% on a surface of a substrate through spraying process or an electron beam deposition process, forming a middle layer of Cr_2O_3 layer having a thickness of 0.2-10 μm by repeating a procedure of applying an aqueous mixed solution of one or more of chromic anhydride, ammonium chromate and ammonium bichromate and firing under heating at 500-900 K for 1-5 hours one time or plural times, heating in an atmosphere or under vacuum or in an inert gas atmosphere at 1200-1500 K for 1-20 hours to form an Al_2O_3 layer produced through preferential oxidation reaction of Al contained in the under coat on the surface of the undercoat just beneath Cr_2O_3 layer as a part of the middle layer, and forming a top coat of ZrO_2 based ceramic on the middle layer.

10. (Previously Presented) A coating material for a thermal barrier coating according to claim 2, wherein the Cr_2O_3 layer as a middle layer is a chemical densified film having a thickness of 0.2-10 μm obtained by applying an aqueous solution of one or more selected from chromic anhydride, ammonium chromate and ammonium bichromate and firing it.

11. (Previously Presented) A coating material for a thermal barrier coating according to claim 2, wherein the undercoat is a heat-resistant alloy having an Al content of 3-24 mass% and represented by the following chemical formula:

MCrAlX

wherein M: one or more selected from Co, Ni and Fe,

X: one or more selected from Y, Hf, Ta, Cs, Ce, La, Th, W, Si, Pt, Mn and B.

12. (Previously Presented) A coating material for a thermal barrier coating according to claim 2, wherein the undercoat is one formed by a spraying process or an electron beam deposition process at a thickness of 30-500 μm.

13. (Previously Presented) A coating material for a thermal barrier coating according to claim 2, wherein the top coat is a ZrO_2 based ceramic coating containing 5-40 mass% of at least one oxide selected from Y_2O_3, CaO, CeO_2, MgO, SiO_2, Yb_2O_3 and Sc_2O_3 and formed by a spraying process or an electron beam deposition process at a thickness of 50-600 μm.